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MEASURING ECONOMIC PERFORMANCE

A STUDY

PREPARED FOR THE USE OF THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

BY THE

REPUBLICAN STAFF

OF THE

JOINT ECONOMIC COMMITTEE

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LETTER OF TRANSMITTAL

NOVEMBER 3, 1986.

Hon. DAVID R. OBEY,
Chairman, Joint Economic Committee, Congress of the United States, Washington, DC.

DEAR MR. CHAIRMAN: I am pleased to submit a study entitled "Measuring Economic Performance." The author is Dr. Kenneth M. Brown, Assistant Director of the Republican Joint Economic Committee staff.

The object of the study is to construct an index of how well the economy has performed over the years. In the process, it obtains a rating of the performance of policymaking during the past three decades.

Sincerely,

JAMES ABDNOR,
Vice Chairman,
Joint Economic Committee.

CONTENTS

	Page
Letter of Transmittal	III

MEASURING ECONOMIC PERFORMANCE

Introduction	1
Variables in the Index	2
A First Look at the Results	3
Weighting the Components of the Index	5
Relation Between Economic Policy and Economic Results	8
Tradeoffs Among Objectives	8
Policy Lags	10
Quick Results Versus Longer Lasting Success	10
Assessing the Performance of Our Policymakers	11
Eisenhower	11
Kennedy-Johnson	11
Nixon-Ford	12
Carter	12
Reagan	12
Republicans Versus Democrats	13
Conclusion	13
Appendix	15

MEASURING ECONOMIC PERFORMANCE

Economic performance during the Reagan years is generally regarded as good, even allowing for the 1982 recession. But according to the data presented here, "good" is a vast understatement, for we have witnessed the greatest improvement in overall economic performance in 33 years. The object of this study is to construct a measure of how well the economy is performing--an "economic performance index," or EPI. In the process, we obtain a rating of the performance of policymaking during the past three decades.

Introduction

Commenting on the Nation's economic performance is a popular activity in Washington. Most of the comments are highly politicized. Typically, the "in" party exudes optimism and highlights the successful part of its record. The "out" party finds gloom and immanent disaster in every statistical release irrespective of its actual content. Is there any possibility of measuring economic performance objectivity? Not entirely; value judgments will always remain. But if perfect objectivity is impossible, then at least the points of subjectivity can be made explicit.

How should economic performance be measured? Growth in real gross national product is perhaps the most widely cited measure of eonomic performance, and with good reason. Rapid GNP growth is not just an end in itself, it is also a necessary condition for achieving many important social goals, such as reducing poverty, defending the Nation, providing a first-class system of education, and so forth. GNP growth pays the bills.

But growth isn't everything. Its benefits can be offset by inflation, high interest rates, or other indicators of trouble in some other dimension of economic performance. A few years ago the term "misery index" was coined; it is the sum of the inflation rate and the unemployment rate. During the years of stagflation, this index soared into the high teens, and it was certainly a more poignant statistic than GNP growth, for people could better relate it to their own lives.

Economic performance has many dimensions that are not readily added up. Furthermore, reasonable people can differ on the relative importance of these dimensions. Is an additional percentage point of inflation really just as bad as a percentage point of unemployment? And what about other facets of economic performance? How do we balance all the variables that affect our view of how well our economic policymakers are doing their jobs?

In order to better measure the economic performance for the United States from 1953 through 1985, we have constructed an index of 10 macroeconomic variables. The weight that each variable has in the index can be adjusted according to one's subjective

view of their importance. Since the index is calculated year by year, we can tabulate each Administration's economic scorecard according to how well they have done, as measured by the index.

This study makes no pretense of providing a totally "scientific" or objective measure of economic performance. Not only is this fundamentally a subjective issue, there are also technical points of possible contention which are raised later in the study and in a technical appendix. But, as will be seen, the index is remarkably robust with respect to changes in the weights; considerable revision in the weighting would be needed to change the ranking of any Administration's performance.

Variables in the Index

Ten variables were chosen for the index. That number could be enlarged indefinitely, thanks to the availability of computers and spreadsheet programs. But because there is a great deal of correlation among these variables, the benefits of extending the list diminish rapidly after about seven or eight variables have been included.

Some of the variables are "goods," such as gross national product, where higher values are better than lower values. Some are "bads," such as the unemployment rate, where less is better. The "bads" are inverted, so that all variables in effect become "goods" and can be added up to form an index which is itself a "good." All variables are measured in terms of percentage changes from the previous year. All are standardized by subtracting their mean and dividing by their standard deviation, so they are more directly comparable with each other. (See the technical appendix for further discussion.) Finally, all 10 adjusted variables are averaged for each year, and this average is the economic performance index (EPI) for the year. (See the Appendix and footnote 1 for discussion of the characteristics of the EPI.) The variables are:

1. *Gross national product in 1982 dollars.*—Real GNP is the classic measure of economic performance. During the 1970's, some claimed that growth was bad because it supposedly caused pollution and used up resources. Our view (now solidly in the majority, we believe) is that GNP growth is not correlated with pollution and, what's more, growth allows us to afford increasingly expensive environmental cleanups. As for resource use, no resource is finite, thanks to the interaction of technology and the free market.

2. *Disposable personal income per capita in 1982 dollars.*—This is related to GNP, but it brings in the notion of economic resources available to satisfy personal wants, and it subtracts taxes, which are spent to buy things perhaps less highly valued than private consumption.

3. *Fixed nonresidential investment in 1982 dollars.*—This variable helps take account of how well the economy is preparing for future productivity, since tomorrow's output depends upon the capital accumulation of today.

4. *Standard and Poor's composite index of stock prices.*—This is related to the value of assets held by individuals and pension funds, and it is also related to the cost of capital faced by firms.

5. *Productivity* (output per hour of all persons, nonfarm business sector, 1982 dollars).—The key determinant of long-term growth in living standards.

6. *Exports in 1982 dollars.*—This measures our ability to benefit from trade. Despite current concern over the deficit in trade, we did not include net exports (exports minus imports) because we do not consider imports to be "bad" per se. To the extent that our trade problems are the result of our inability to sell in world markets, the export variable should pick this up.

7. *Corporate profits in 1982 dollars* (using GNP deflator).—Another measure of the health of the private economy and of the wealth of individuals and their pension funds.

8. *Consumer price index* (inverted).—Inflation is undesirable, particularly when it is not anticipated, because it erodes savings and changes behavior in ways that are inefficient. In a macroeconomic sense, inflation is bad because it so often leads to a recession.

9. *Interest rates,* as measured by the rate on 3-month T-bills (inverted).—High interest rates tend to reduce investment in productive assets, housing, and other consumer durables. True, high rates are the result of a market process, and it may be argued that lenders like them, but it is likely that most people regard high interest rates as a mark of unsuccessful economic policy.

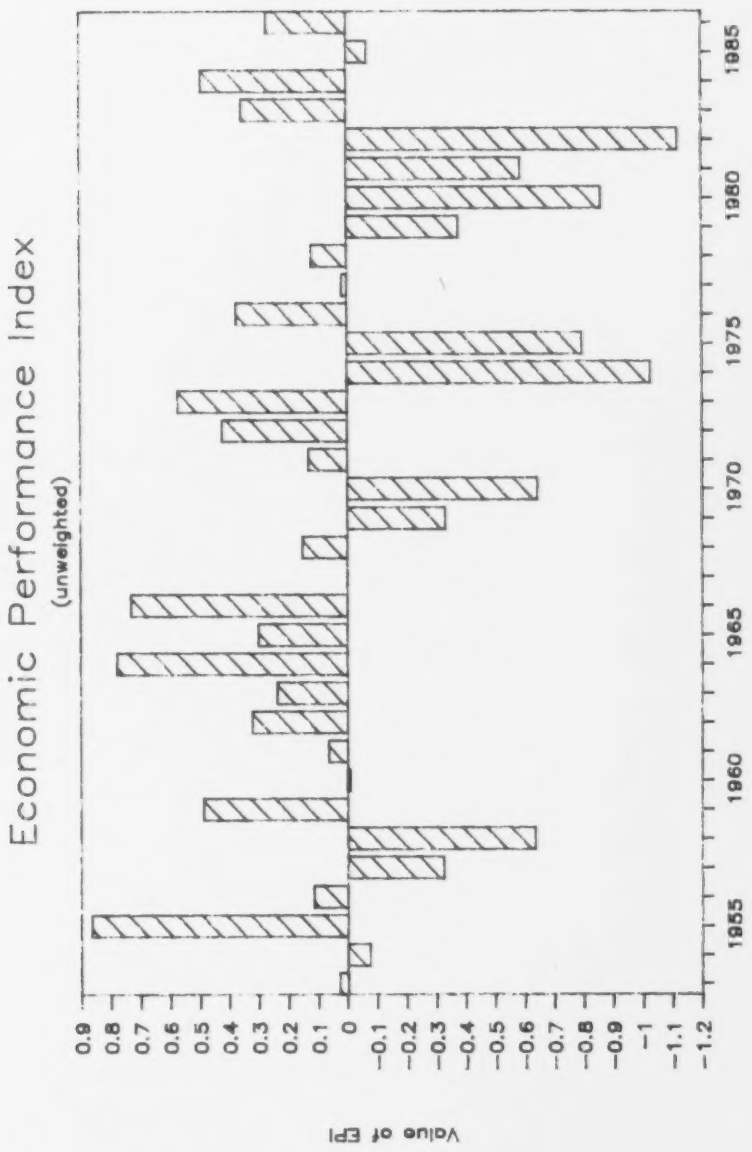
10. *Unemployment rate,* civilians (inverted).—This needs no explanation as a measure of economic performance. Achieving full employment, it is unanimously agreed, is a central goal of economic policy.

A First Look at the Results

Figure 1 shows the values of the economic performance index from 1953 through 1986. Forecasts are used for 1986 and are described in the Appendix. Actual values for the EPI are also given in the Appendix, Table A-1.[1]

[1] Because of the normalization process, the numerical values of the EPI have no clear intuitive meaning, except that higher is better. They are related to year-to-year changes in the underlying data, so the fact that the EPI was higher in 1959 than in 1977, for example, does not mean that people were more prosperous in 1959 but only that economic performance *improved* more in 1959.

FIGURE 1


Economic Performance Index
(unweighted)
Value of EPI
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
−1
−1.1
−1.2
1955
1960
1965
1970
1975
1980
1985

According to the EPI, the 1950's were a bit better than average, with low interest rates and stable prices, but two recessions pushed the EPI into negative territory. Beginning in 1961, there was a streak of positive values, and the 1960's were by far the best decade in the sample. Between 1969 and 1978, there were two serious recessions. The years of positive values were not particularly outstanding, as GNP growth was offset by inflation and slow productivity growth.

The worst 4-year period on the chart is 1979 through 1982, and here is where the EPI shows its value by combining offsetting forces. GNP grew between 1979 and 1981, but interest rates and inflation (among other things) were so unfavorable as to pull the EPI well below the average.[2] Correspondingly, the Presidential contest of 1980 was not fought over GNP growth, but over inflation and interest rates. The year 1982 was one of the worst years in the series, owing mainly to the recession, which was reflected in GNP, unemployment, investment, and personal income.

In 1983, the economy picked up, and 1984 was one of the best years in the series; 1985 dropped back to the norm, but 1986 promises to be another year of good performance, thanks mainly to moderate growth, low inflation, and declining interest rates.

The results are more or less in line with general perceptions of economic performance during these years. According to a Wall Street Journal-NBC poll (WSJ, June 2, 1986), a poll of 2,239 adults revealed that 27 percent of the respondents thought the economy was strongest in the 1980's, 19 percent the 1970's, 24 percent the 1960's, and 19 percent the 1950's. Republicans and Democrats in the poll diverged greatly and gave higher ratings to decades when their party held power.

Is there a downward trend in the index? Had that question been asked during the 1979–82 slump, the answer would have been a clear yes. A trend line fitted to all of the data still would show a negative slope, but the better performance of the past several years may indicate a return to earlier levels. Indeed, 1983–86 compare favorable with any 4-year period outside of the middle 1960's. The improvement since 1982 is clearly the biggest turnaround in the entire period and—were data available—would probably compare favorably to any peacetime economic improvement..

Weighting the Components of the Index

Should each of the 10 components of the index be given equal weight, as in Figure 1, or should some count more than others? This is where the element of subjectivity comes in, since the relative importance of these components varies from person to person.

Thanks to the cooperation of Robert J. Eggert, whose Eggert Economic Enterprises produces the well-known *Blue Chip Economic Indicators,* we have obtained the weights assigned to our 10 compo-

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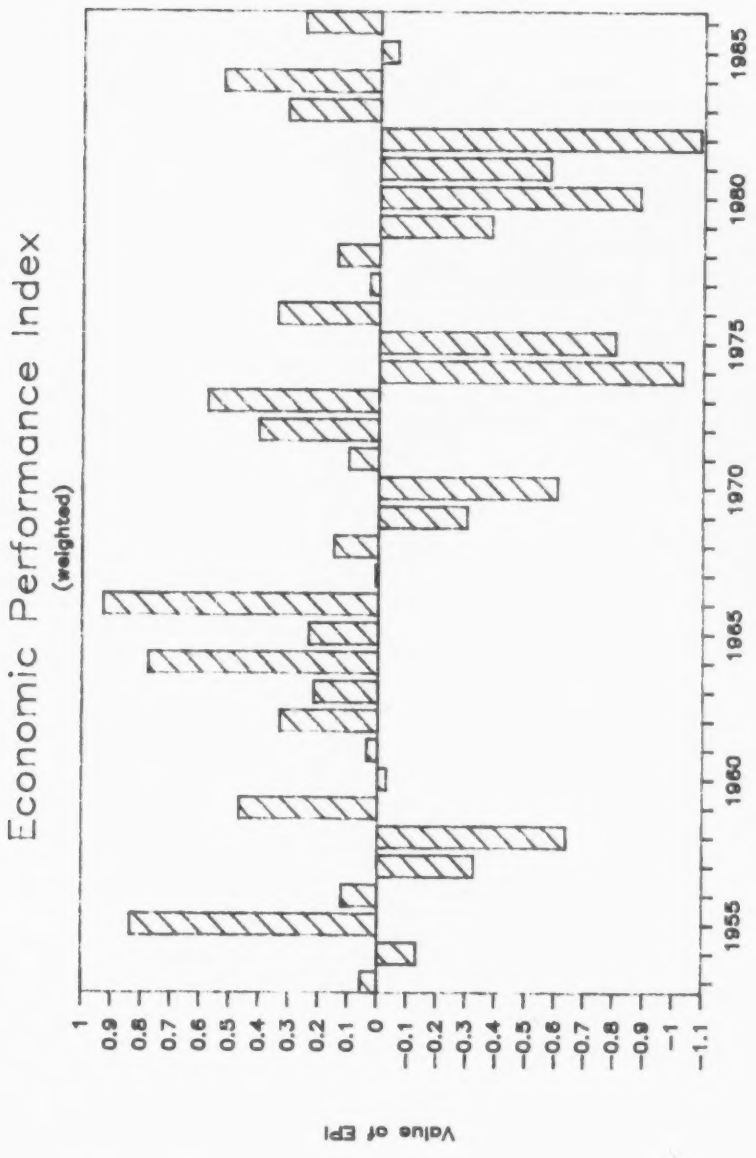
[2] The behavior of the economic performance index is fairly similar to that of the Commerce Department's Index of Coincident Indicators, but during periods of inflation the EPI turns down more sharply. This is because the Index of Coincident Indicators does not include a measure of price changes. This also illustrates the difference in the objective of the two indexes. The Commerce Department is attempting to measure overall economic activity, while the EPI attempts to measure the success of policymakers in achieving the major economic objectives considered important by the citizenry.

nents by the 52 leading economic forecasters who participate in the Blue Chip survey. In August 1986, the panel was asked to rate the relative importance of the 10 economic statistics as measures of how well the economy is doing. (See Appendix, Figure A–1 for the results). Gross national product (8.8 points out of 10) was considered most important, followed by disposable personal income (7.6). Next were fixed investment (6.8), the CPI (6.7), unemployment (6.7), productivity (6.1), interest rates (6.1), S&P's stock index (5.8), exports (5.8), and profits (5.8).

Each column of values was multiplied by its respective weight, and then the rows of weighted values (each representing a year) were added up to form a total for each year. Each year's total was then divided by the average of the weights (6.62 in this case) in order to make the magnitudes of the weighted EPI comparable to the unweighted values of Figure 1. Figure 2 shows the results.

FIGURE 2


Economic Performance Index
(weighted)
Value of EPI
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0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1
-1.1
1955
1960
1965
1970
1975
1980
1985

The results are scarcely changed. In fact, none of the earlier statements summarizing the unweighted results need be changed in the slightest; only a few details differ. The Kennedy-Johnson period does a bit better with the weighted EPI; the Eisenhower period does worse, and the others are virtually unchanged. Rankings are unchanged.

Statistically, the two data series are highly correlated (R-squared = 0.99). This similarity between the weighted EPI and the unweighted EPI should not, however, be too surprising, for there is a great deal of correlation among the variables. For example, GNP and unemployment move together, but in opposite directions. By inverting unemployment change to make it additive with the "goods," we have created a data series that is highly correlated with GNP. No matter how we weight the two—10 for GNP and one for unemployment, or the opposite—the series we get by adding them together will all be about the same. This holds true to a large extent for most of the data series.

It is unlikely that these weights are much different from those that any other representative panel of economists would assign. Experiments with various plausible sets of weights did not produce significantly different results. It is doubtful that even a diligent effort to "cook" the data by assigning high weights to the variables that reflect well on one's favorite years (or favorite President) would make much of a change in the final result.

Relation Between Economic Policy and Economic Results

Before we examine the EPI as an indicator of performance by policymakers, it is worthwhile to discuss the relation between what these policymakers do and how their actions are reflected in the data.

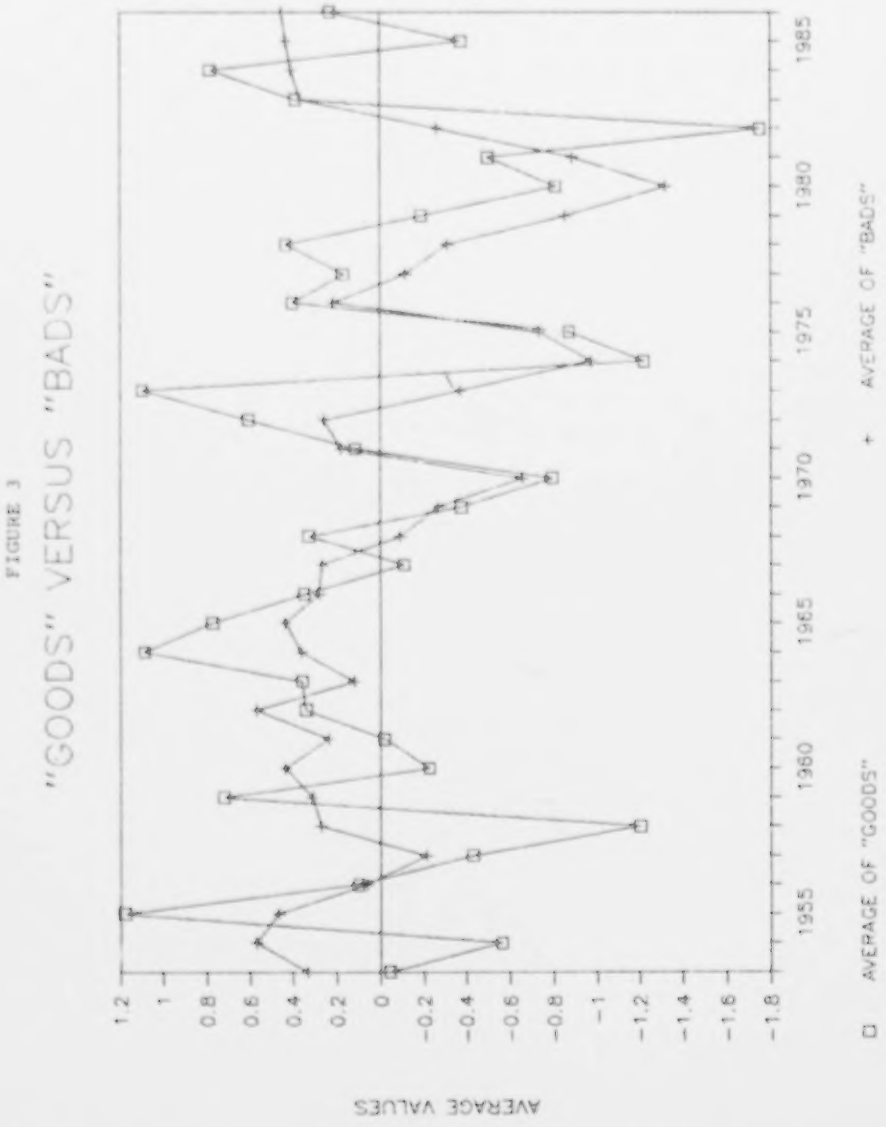
Tradeoffs Among Objectives

First, there is the matter of tradeoffs possible among the 10 variables in the EPI. Do policymakers have a choice in which ones they will emphasize? In the short term, there may be a possible tradeoff between inflation and unemployment, as depicted by the Phillips Curve. Expansionary monetary and fiscal policy can reduce the unemployment rate, but only at the cost of higher inflation.

With the EPI, however, the choices are more complex for the policymakers who intends to maximize the value of this index. Unemployment and inflation are just two of the "bads." There is also another bad—high interest rates—as well as seven "goods." What kind of juggling act is required for policy success? Is there a tradeoff between the "bads" and the "goods"? That is, should a policymaker go for broke on the goods and let the bads do their worst, or should he try to strike a careful balance?

Figure 3 grapns two subseries of the EPI—an index of the three bads and an index of the seven goods. There is significant (but not extremely close) correlation. The R-squared between the two is 0.25, and the t-value of the linear regression coefficient is 3.27. in other words, when the "goods" are improving, the "bad" are subsiding. (Remember that the "bads" have been inverted, so that an

increase in the "bad" index means that the unemployment rate is declining, the inflation rate is declining, or interest rates are coming down.)



This seems to indicate that there is basically only one variety of good economic conditions, one where the growth variables are doing well and where inflation, interest rates, and unemployment are declining. In general, it is not possible to get a good reading on the EPI by aiming at a large spread between the goods and the bads; they tend to move together. "Stagflation" was a phrase coined to denote the simultaneous presence of inflation and stagnant GNP growth—a common feature of the 1970's. In contrast, the situation of rapid GNP growth together with inflation and high interest rates—the "business boom" of the textbooks—is not characteristic of the period under study here.

Policy Lags

Timing is another important issue for evaluating economic policy. A President's term is 4 years and and so he must be held responsible for economic policy during those years. But when does his policy actually affect economic performance? The moment he takes his oath of office? Surely not. It takes a considerable time for any significant changes in fiscal policy to be enacted, and still more for those changes to affect the economy and be reflected in the economic data. For the most part, a new President spends a year operating under his predecessor's budget. Significant tax changes take even longer, as is evidenced by the fact that the 1981 Economic Recovery Tax Act was not fully phased in until 1983. Monetary policy is faster, since the Board of Governors of the Federal Reserve System can act on their own, but still there are lags between changes in the monetary aggregates and changes in output and price levels. Futhermore, the Fed's policy may not coincide with the Administration's.

Worse still, a new President may have inherited severe economic problems (perhaps the reason for the change in Administrations) from his predecessor that take an extended period to correct. Like the supertanker that takes 4 miles to stop, unfavorable economic trends usually take a long time to reverse.

Usually, when analysts speak of economic events during a President's term they mean the years he held office. In our opinion, however, it is more accurate to lag the "window of responsibility" by 1 year. Thus, President Eisenhower's policy is best measured by economic performance from 1954 through 1961; the Kennedy-Johnson Administration's from 1962 through 1969; the Nixon-Ford Administration's from 1970 through 1977; President Carter's from 1978 through 1981; and President Reagan's from 1982 through the present. These time periods are denoted as "term + 1."

In the following presentations of the EPI, both timespans—"term" and "term + 1"—are given. As we shall see, some interesting comparisons emerge from the two methods of assigning responsibility.

Quick Results Versus Longer Lasting Success

Perhaps the most important choice that faces a new Administration is whether to attempt to achieve economic success quickly or whether instead to lay a foundation for better economic performance later on, at the cost of enduring criticism for a mediocre (or worse) economy in the short term. Policymakers may or may not realize that this is their dilemma, but such a choice must be made in some fashion.

At the risk of oversimplifying, the way to get quick success is to induce the Federal Reserve to allow fairly rapid expansion of the money supply while at the same time increasing governmental spending on transfer payments or on other programs that quickly increase aggregate spending. This method, however, eventually leads to increasing inflation and high interest rates which must be stopped in some fashion, usually at the cost of incurring a recession.

The alternative approach to policy is to try to get onto a long-term path of stable growth with low inflation. The economy's maximum sustainable annual growth rate is apparently somewhere between 3.0 percent and 3.5 percent. Getting to this path of sustainable growth may incur some heavy shortrun costs if the economy is in the inflationary phase. Furthermore, 3.0 percent growth is not sufficiently spectacular to win an Administration rave reviews on the editorial pages. Yet this cautious approach to policy is more rewarding in the long run, as it avoids the debacle of grappling with rapid inflation.

The economy is too complex to permit neat classification of specific policies as either short term or long term. Nevertheless, when we examine the data in greater detail there will emerge strong suggestions that different Administrations have, explicitly or implicitly, followed one or the other of these plans.

Assessing the Performance of our Policymakers

Based on previous discussion, we can summarize the performance of the five Administrations since 1953 by the weighted or unweighted economic performance index, and with the years of responsibility being defined as either the actual years of each Administration ("term") or as that set of years lagged 1 year ("term + 1"). Table 1 gives the average EPI for each Administration by four different measures.

TABLE 1.—ECONOMIC PERFORMANCE INDEX BY ADMINISTRATION

	Unweighted		Weighted	
	Term	Term + 1	Term	Term + 1
Eisenhower	.057	.062	.044	.041
Kennedy-Johnson	.323	.274	.335	.293
Nixon-Ford	−.161	−.118	−.164	−.122
Carter	−.274	−.426	−.272	−.424
Reagan	−.109	−.014	−.105	−.011

Eisenhower

The Eisenhower Administration's EPI is somewhat above average (i.e., takes a positive value) by each measure. It is second best of the five we have computed. Weighting causes some decline. Going from the "term" measurement to the "term + 1" results in little change, since the Eisenhower Administration thereby loses credit for the slightly above-average year of 1953 and gains responsibility for the similar EPI of 1961. The Eisenhower policy was basically "peace and prosperity, but watch out for inflation." While this period comprised two recessions, it also erased inflationary expectations, thus paving the way for later expansion.

Kennedy-Johnson

This Administration is well above the others in terms of its EPI. Weighting improves its score somewhat, even though the weighting reduces the influence of productivity growth, which was rapid

during the 1960's. The score falls significantly when we move the years of responsibility forward from "term" to "term + 1." In addition, we can see from Figures 1 and 2 that the EPI fell off quite markedly in the last years of the Kennedy-Johnson Administration. This pattern is consistent with the view that this Administration was able to build upon the noninflationary Eisenhower years, so that expansive fiscal and monetary policies of the early 1960's resulted in rapid growth rather than inflation. Toward the end, however, when inflation (induced by the financing of the Vietnam war) began to cause concern, economic performance tailed off.

Nixon-Ford

This Administration compiled the second worst EPI during its term. Some of its bad performance resulted from the first oil shock and the policies that were adopted to deal with that problem.

However, the Nixon-Ford EPI shows quite a large improvement when we move from the "term" to the "term + 1" measurement. This reflects the problems it inherited (inflation and an expensive, intractable war). The year it picks up (1977) by this shift was substantially better than the one it loses (1969).

Carter

Any way it is measured, the Carter Administration is far and away the worst performer. Its best score in Table 1 is much worse than any other Administration's worst score. What's more, there is a huge decline in the Carter EPI when the "term + 1" measurement is used. Under this method, it loses the fairly good year of 1977 and gains responsibility for 1981, which was ravaged by inflation and high interest rates. The Carter Administration bequeathed to its successor a stagflation that took 2 years to eliminate. Perhaps the Carter Administration was trying to emulate the policy of the previous Democratic Administration by adopting expansionary monetary and fiscal policies. But with scant success, for the immediate rewards were less and the subsequent costs were greater.

Reagan

The Reagan EPI is unique. It has the largest range of highs and lows. It has by far the strongest upward trend. And it has the greatest improvement when we switch from "term" to "term+1," despite the fact that this involves only ascribing its first year, 1981, to its predecessor. (The year 1986 remains in the Reagan average in both cases.) Clearly the Reagan Administration provides the best example of a policy of taking the heat early in order to build a foundation for noninflationary growth. While only third best of five, it is likely that the Reagan EPI will move up one place by the time its 8 years are over.

The Reagan Administration has presided over the greatest improvement in economic performance in the 33 years charted here. Earlier, the Kennedy-Johnson Administration improved upon the Eisenhower average by 0.212 points, using the unweighted EPI for "term+1." The Reagan Administration doubled that improvement

with a 0.412 increase in the EPI over the average for the Carter years. Similar results occur when we see whether each Administration improved upon the last year of its predecessor. Regardless of whether we count 1980 or 1981 as the last Carter year, the improvement by 1984 far exceeds any other such increase. The Reagan improvement was 1.351 over 1980 and 1.079 over 1981. The next best mark was during the Kennedy-Johnson Administration, which managed by 1964 to improve on 1961 by 0.716.

Republicans Versus Democrats

Table 2 accumulates the EPI's of each Administration. When the years of responsibility for results are defined to coincide with the actual terms of the two parties, the Democrats come out ahead. But as was noted above, the Democrats have a way of achieving relative success early and then bestowing problems on their successors. In contrast, two of the three Republican Administrations look better when the "term+1" measure is used. In fact, neither of the two "term+1" differences between Democrats and Republicans is statistically significant.

TABLE 2.—ECONOMIC PERFORMANCE INDEX BY PARTY

	Unweighted		Weighted	
	Term	Term+1	Term	Term+1
Republicans	−.068	−.025	−.072	−.033
Democrats	.124	.041	.133	.054
Differences	.192	.066	.205	.087

Conclusion

The economic performance index constructed here is not some form of economic alchemy. It is not even very complicated. It is merely an attempt to sum into one number the principal measures of economic performance that are generally accepted as legitimate and useful. This is little different in principal from the Dow Jones Industrials, the Commerce Department's Index of Leading Indicators, or the Federal Reserve Board's industrial production index.

The index presented here is easy to calculate on a personal computer, though it is perhaps less easy to conceptualize. The results are quite robust with respect to the weights assigned to the individual measures of performance. And, while disagreement may arise as to variables included in the index, everything in the index is quite visible.

Looking at the economy through the lens of this index helps us to judge the relationship between particular policy regimes and their effects on the economy. In particular, the study's emphasis on the lag between an Administration's tenure in office and the recorded effects of that Administration's policies will, it is hoped, be repeated in other analyses of economic policy. Overall, the findings presented in this study should give the reader a better understanding of the economic accomplishments—and failures—of the past 33 years.

APPENDIX

1. Choice of Variables

There is unlikely to be much objection to the 10 variables included in the EPI. More likely, readers will point to variables that have been left out. The following is a discussion of variables that were considered but not included.

Sectoral measures.—Housing starts, agricultural output, manufacturing production, etc. Housing starts are well correlated with interest rates. Manufacturing and its component industries are correlated with GNP. Agricultural output bears some relation to exports, which is included, but the basic reason for excluding agriculture—despite its importance—is that at only about 2 percent of GNP it does not rank in the top 10 economic indicators of overall performance.

Exchange rate.—Recently policymakers have tried to lower the value of the dollar. In years past they have tried to raise its value. Clearly there is no enduring consensus as to whether the value of the dollar should be raised or lowered.

Budget deficit.—The deficit is largely a policy, not an economic good or bad. To the extent that it is a "bad" because it harms current economic performance, it is reflected in the other variables. To the extent that it was caused by recessions, this too will show up in other measures. Perhaps the current deficit will harm the economy in years to come, but there is wide disagreement as to the magnitude of this harm.

Income distribution.—A good case could be made for including some measure of the distribution of income. Perhaps median income should have been used instead of average personal income. It would be reasonable to include the poverty rate, but the data go back only to 1959. Furthermore, there are unresolved problems in adjusting the poverty rate for changes in the price level. Other measures of income distribution are not available annually.

2. Characteristics of the CPI

The values of the variables are given in Table A-1. The EPI for each year is constructed as follows: (1) Convert each of the three "bads,"—unemployment rate, inflation, and interest rates—to a "good" by inverting it; (2) convert each variable into a percentage change from the previous year's value: $z_t=(x_t-x_{t-1})/x_t$; and (3) convert each of these values into a t-statistic: $t=(z-\bar{z}/s$, where $\bar{z}$ is the mean of z and s is its standard deviation. This gives a column of values for a variable that has a mean of zero and a standard deviation of one. Finally, for each year add up the variables and divide by 10 (or the average of the weights) to get the EPI for that year. The unweighted and weighted EPI's are given in Table A-1.

By converting data into percentage changes, we have induced a certain result—for example, that recent high rates of inflation and unemployment relative to that of the 1950's do not count much against recent Administrtations. Even if the unemployment rate had grown steadily for 33 years (constant percent change), it would contribute a zero to the EPI every year. Some might prefer to give earlier Administrations higher marks for their lower unemployment rates, but in the present method this does not happen. The present method is probably a good representation of how people actually evaluate the state of the economy—is this year better than last year?

3. Forecasts for 1986

The September 10 consensus forecasts by *Blue Chip Economic Indicators* for 1986 were used for real GNP, the consumer price index, disposable personal income, investment, profits, interest rates, and unemployment rates. Forecasts for productivity and exports were taken from the *Blue Chip Econometric Detail.* The S&P's index is assumed to average 230 for the year.

TABLE A–1.—CALCULATED VALUES OF THE ECONOMIC PERFORMANCE INDEX

Year	Unweighted	Weighted
1953	.028	.055
1954	−.074	−.132
1955	.866	.836
1956	.116	.120
1957	−.325	−.326
1958	−.633	−.639
1959	.489	.467
1960	−.008	−.031
1961	.063	.036
1962	.321	.331
1963	.239	.216
1964	.779	.775
1965	.301	.234
1966	.731	.929
1967	−.002	.008
1968	.153	.149
1969	−.331	−.301
1970	−.644	−.605
1971	.131	.099
1972	.423	.405
1973	.572	.577
1974	−1.025	−1.028
1975	−.793	−.800
1976	.375	.342
1977	.018	.032
1978	.120	.143
1979	−.376	−.380
1980	−.859	−.833
1981	−.587	−.577
1982	−1.118	−1.086
1983	.355	.311
1984	.492	.527
1985	−.069	−.059
1986	.271	.253

FIGURE A-1

SPECIAL QUESTIONS

I. I am sure you have often thought about how best to measure overall economic performance. As we all know, GNP growth is the single most cited statistic. Dr. Arthur M. Okun several decades ago suggested the "misery index" (the sum of the inflation and unemployment rates) to reflect other facets of the economy.

Here are the panelists' views on the relative importance of 10 well-known economic statistics as measures of how well the economy is doing. They used our usual rating scale with 10 denoting "highly important indicator of overall economic performance" down through 1, which denotes "little or no importance as an economic indicator."

Kenneth Brown, assistant director of the Joint Economic Committee, has offered to construct an overall indicator of economic performance, consisting of the weighted average of these 10 indicators from 1953 to the present. He plans to call it the "Economic Performance Index."

ECONOMIC VARIABLES	BLUE CHIP RATING 10=Highly Important 1=Little or No Importance
1. Gross National Product (constant dollars)	8.8
2. Disposable personal income (constant dollars)	7.6
3. Fixed nonresidential investment (constant dollars)	6.8
4. Consumer Price Index	6.7
5. Unemployment rate, civilian	6.7
6. Productivity (output per hour of all persons, nonfarm business sector)	6.1
7. Interest rate on 3-month T-Bills	6.1
8. S&P composite index of stock prices	5.8
9. Exports (NIPA basis, constant dollars)	5.8
10. Corporate profits (constant dollars)	5.8

II. We asked our group when we will be due for the next recession. Of the 42 courageous enough to respond, 20 (nearly half) said they see it starting in 1989. If correct, it will be the longest peacetime recovery on record--72 months! The prior peacetime record was 58 months, beginning in March of 1975 and lasting through January of 1980.

Only three economists see it starting this year. But no matter what year it does begin, the overwhelming majority expects it to be a short one--less than a year. Here is the rundown by years.

BLUE CHIP CONSENSUS - NUMBER RESPONDING

Year	Recession To Begin	Recession To End
1986	3	0
1987	6	4
1988	9	7
1989	20	13
1990 (and later)	4	18